

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/725,348
Attorney Docket No. Q78682

REMARKS

Claims 1-20 are all the claims pending in the application. In order to provide more varied protection, Applicant adds claim 21, which is clearly supported throughout the specification.

I. Summary of the Office Action

The Examiner withdrew the previous rejections. The Examiner, however, found new grounds for rejecting the claims.

II. Prior Art Rejections

Claims 1-6, 11, 12, and 16-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over by U.S. Publication No. 2002/0060706 to Sawano (hereinafter “Sawano”) in view of U.S. Patent No. 6,488,354 to Hosono (hereinafter “Hosono”), claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawano and Hosono in view of U.S. Patent No. 6,460,963 to Endo (hereinafter “Endo”), claims 8-10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawano and Hosono in view of U.S. Patent No, 6,764,158 to Arquilevich et al. (hereinafter “Arquilevich”), claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawano and Hosono in view of Arquilevich and Endo, and claims 14, 15, 19, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sawano and Hosono in view of U.S. Patent No. 6,439,683 to Matsumoto (hereinafter “Matsumoto”).

Applicant respectfully traverses these grounds of rejections in view of the following comments.

Of these rejected claims, only claims 1 and 13-20 are independent. These independent claims in some variation and *inter alia* recite: a carriage that is movable and that holds said ink ejecting sections, a first ink ejecting section that is set to eject ink for printing a predetermined

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region in said image, a darkness of said predetermined region being lower than a predetermined value, ...wherein said second ink ejecting section is subject to a greater vibration that is generated by a movement of said carriage than said first ink ejecting section.

The Examiner acknowledges that Sawano, Endo, Arquilevich, and Matsumoto do not disclose or suggest the unique features of these independent claims set forth above. The Examiner, however, contends that the newly found reference, Hosono cures the deficiencies of the prior art of record and discloses the vibrations set forth in these independent claims (*see page 6 of the Office Action*). Specifically, the Examiner contends that col. 13, lines 35 to 54 of Hosono discloses the unique features of vibration as set forth in these independent claims. Col. 13, lines 35 to 54 of Hosono recite:

In addition, the controlling part 49 can obtain the information about the kind of the ink (ink-kind-information) that is stored in the controlling IC 18 mounted in the ink cartridge 2. In general, viscosity of ink including pigments as colorant tends to increase more than that of ink including dye as colorant. In addition, among a plurality of inks including pigments or a plurality of inks including dye, a black ink tends to increase more than a deep color ink such as a cyan ink and a magenta ink. Then, the deep color ink tends to increase more than a light color ink such as a yellow ink, a light cyan ink and a light magenta ink. Thus, it is preferable that the tendency for the viscosity of the ink to increase is judged based on each kind of the ink (ID information). For example, a kind of the ink has a higher tendency for the viscosity of the ink to increase, the number of supplies of the micro-vibrating pulses DP0 may be increased, the repeating period T1 of the micro-vibrating pulses DP0 may be extended, and/or the amplitude h of the micro-vibrating pulses DP0 may be enlarged.

As is visible, Hosono simply discloses micro-vibrating operation for stirring the ink (col. 2, lines 16 to 33 and col. 13, lines 54 to 61). That is, Hosono clearly fails to disclose or even remotely suggest the vibration being generated by the movement of the carriage i.e., the vibration as set forth in these independent claims. In short, Hosono does not cure the above-identified

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deficiencies of the prior art of record. For at least these exemplary reasons, claims 1 and 13-20 are patentable over the prior art of record. Claims 2-12 are patentable at least by virtue of their dependency on claim 1.

III. New Claim

New claim 21 is clearly patentable over the prior art of record for the unique features with respect to the vibration set forth therein.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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